ATTACHMENT 3

PERSONNEL QUALIFICATIONS

I. RST 3 CORE RESPONSE TEAM PERSONNEL BREAKDOWN

The Core Response Team will be comprised of nineteen (19) members dedicated to performing the requirements in the Performance Work Statement. Two of the 19 personnel shall be located in an office in Puerto Rico (PR) in order to support the U.S. Environmental Protection Agency's Caribbean Environmental Protection Division located in Guaynabo, Puerto Rico. CRT personnel shall meet the qualifications and requirements as detailed below and shall be able to work independently or in tandem with other team members.

Key personnel for the Core Response Team are as follows:

Level 4	Program Manager
Level 3	Chemist/QA/QC Specialist Geologist/Hydrogeologist Air Specialist (Environmental Scientist) Safety Officer (Environmental Scientist) Information Technology Manager

Non-Key personnel for the Core Response Team are as follows:

Level 2	Environmental Scientist (2)
(1 in PR)	Environmental Scientist/Biologist/Chemist (1)
Level-1	Total of 10 persons with mixture of science degrees such as
(1 in PR)	Biologist, Chemist, Geologist, Hydrogeologist, Microbiologist

A. CORE RESPONSE TEAM REQUIREMENTS

The contractor shall designate Core Response Team personnel to perform the following functions and responsibilities in support of the contract.

1. **Readiness Coordinator -** The contractor shall designate a Readiness Coordinator who shall be responsible for the implementation of the Readiness Plan. The Readiness Coordinator position requires a minimum of a B.S. Degree in Science or Engineering and five (5) years managerial and technical experience in response to releases of hazardous substances and oil. The Readiness Coordinator shall have experience in the management of training, resources, equipment and personnel in an emergency response/readiness environment, as well as developing plans and Standard Operating Procedures to maintain response readiness. The Readiness Coordinator shall be responsible for all aspects of readiness for this contract, including but not limited to:

    - Ensure that contractor responders are appropriately trained and equipped to provide effective and safe response to emergency situations.

    - Ensure response personnel maintain required training in the operation of monitoring and sampling equipment and the use of Personal Protective Equipment.

- Maintain a pool of field ready personnel capable of performing basic field activities in support of emergency, disaster and WMD responses.
- Maintain a Readiness Plan and developing Field Communications, Data Management and/or Equipment Management Plans, as required.

In addition, the Readiness Coordinator shall also meet the qualifications of a Team Leader.

2. **Team Leaders -** The contractor shall designate Team Leaders who shall serve as a resource to manage CRT personnel in order to maintain an efficient span of control. Team Leaders shall have, at a minimum, a BS degree and at least five (5) years experience in conducting emergency and environmental response activities. Team Leaders shall also have experience in leading and/or managing a team of responders. Team Leaders shall meet the following qualifications:

- Knowledge of air sampling protocols for organic and inorganic compounds using EPA's compendium of air sampling methods and with NIOSH methods for air sampling.
- Knowledge of the design and development of air sampling and air monitoring plans for emergency responses and removal actions.
- Proficient in the use of air dispersion and emission rate models (HPAC, CATS-JACE, CAMEO, ALOHA) of potential or on-going releases.
- Proficient in conducting health risk assessments related to emergency response incidents.
- Experience in conducting health and safety monitoring, evaluations, inspections, and plan development, which are required under 29 CFR 1910.120 or other federal regulations that are applicable under the Oil Pollution Act.
- Knowledge of personal air monitoring and/or air sampling on-site as per 29 CFR 1910 (1910.120 and 1910.100, etc).
- Proficient in the use of individual PPE as required to conduct field activities at uncontrolled hazardous waste sites and spills/releases of oil and hazardous substances as outlined in the EPA Standard Operating Safety Guides Exhibit 5.5 for Levels of Protection B, C, and D, and OSWER Publication number 9285.1-03.
- Proficient in the operation, procedures, and maintenance of sampling equipment to collect soil, water, waste, sediments, and air samples from uncontrolled hazardous waste sites or spills/releases of oil or hazardous substances.
- Successful completion of training courses specific to multi-media sampling for hazardous substances.

- Proficient in multi-media sampling protocols following EPA Requirements for Quality Management Plans (QA/R-2) (PDF 30pp, 86K) - March 2001 (Reissued May 2006), EPA/240/B-01/002. Reissue Notice (PDF 2pp, 91K). Contains specifications for organizations that receive funding from EPA (equivalent to those in EPA Manual 2105-P-01-0). Located: http://www.epa.gov/quality/qmps.html

- Proficient in multi-media sampling for radiological analyses and interpretation of data.

- Ability to respond to high hazard responses, collecting appropriate chemical, biological, and radiological multi-media samples and the ability to collect samples as evidence to support law enforcement purposes.

- Proficient in the interpretation of sampling data and the preparation of technical reports.

B. GENERAL PROFICIENCY REQUIREMENTS FOR ALL FIELD PERSONNEL

All contractor personnel that perform field activities shall be able to meet the following requirements:

- ICS level 200 training and the ability to function in a National Incident Management System/Incident Command System (NIMS/ICS) structure in those functions that are consistent with the RST Performance Work Statement (PWS). Typical areas where RST Emergency Response personnel or resources may be required are documentation unit, division/group supervisor, strike team leaders, and technical specialists.

- Knowledge of and competence in the donning and doffing of the various levels of PPE (Levels B through D). Knowledge of the appropriate methods for inspection of PPE including, SCBA, and air purifying respirators.

- Proficient in multi-media (air, soil, water, chip/wipe, container) sampling procedures during emergency responses.

- Knowledge of decontamination procedures associated with hazardous materials, chemical, nuclear and biological agents. Demonstrated knowledge of emergency decontamination and extraction procedures, evaluation of decontamination efficacy and decontamination of field sampling equipment.

- Ability to perform standard documentation activities during emergency response using digital and conventional 35 mm cameras, handheld GPS, handheld computers/PDAs, video camera equipment.

- Ability to draw site sketch/map from field observations.

- Knowledge of chain-of-custody and evidence protection protocols.

- Proficient in the operation, maintenance, and calibration of state-of-the-art portable field instrumentation to analyze soil, water, waste, sediments, and air samples collected from uncontrolled hazardous waste sites or spills/releases of oil or hazardous substances.
- Proficient in the operation, calibration and maintenance of the equipment listed on the National Emergency Response/Counter Terrorism Equipment Priorities List (http://www.epa.gov/oamsrpod/ersc/start/eoe.pdf).
- Proficient in the interpretation of data output, and knowledge on the limitations, of field analytical equipment/field test kits, and standard and state-of-the-art field monitoring instruments including the equipment listed on the National Emergency Response/Counter Terrorism Equipment Priorities List.
- Knowledge of Weapons of Mass Destruction (WMD) agents associated with WMD events and other high hazard responses. Capability to identify agents of concerns in WMD events. Knowledge of appropriate decontamination procedures in WMD events.
- Ability to use monitoring and sampling specific to neurological, biological and chemical (NBC) agents (e.g., nerve and blister agent detection kits, Environics M90 choking and blister detector, biological indicator tools, biological multi-media sampling, Gamma Spectrometer, Summa canisters, portable GC/MS, and portable IR).
- Knowledge of the EPA's Quality Assurance program as it applies to field sampling activities.
- Experience in direct on-scene response to investigate spills and releases of hazardous substances and oil, and emergency response to a variety of releases and incidents.
- Knowledge of the operational check-out and radiation surveillance procedures associated with various radiological monitoring equipment, including the following: sodium-iodide based micro-R meters, GM pancake detectors, ion chambers; gas-proportional detectors, particulate air samplers, field-based multi-channel analyzers, real-time alarming rate dosimeters.
- Ability to interpret radiological data collected in support of emergency response incidents.
- Successful completion of basic radiation training for response personnel, including basic and advanced levels (16 hours) and subsequent four hour annual radiation refresher training.
- Proficient in the use of Microsoft Office software including Access and Excel and familiar with relational databases such as Oracle.
- Experience in the basic techniques of data management including databases applicable to scientific data management.
- Knowledge of the data requirements of environmental projects and ability to organize and maintain project information and documentation.

- Ability to operate environmental databases and import and export data to other data management tools.

C. **KEY PERSONNEL**

The following Core Response Team positions are identified as Key Personnel in accordance with Clause EPAAR 1552.237-72. All Key Personnel are expected to perform duties in support of the CRT when they are not fully engaged in their specific areas of expertise. A master's degree in the related field can substitute for two years of experience for Key Personnel.

1. **Program Manager (Level 4) -** The Program Manager is responsible for all activities of the contractor. This position requires a minimum of a B.S. Degree and 12 years of experience in field related activities including, but not limited to, sample collection, air monitoring, site investigation, emergency response, documentation of site conditions, sampling plan preparation and on-site management of field activities. In addition, the Program Manager shall have experience in managing complex contracts, including subcontractors; experience in tracking and reporting site/project specific costs and the ability to communicate effectively, orally and in writing.

2. **Chemist/QA/QC Specialist (Level 3) -** This position requires a minimum of a B.S. Degree and 6 years of experience in the application of chemical principals as related to hazardous waste sites and spills of oil and hazardous substances. Qualifications include:

    - Proficient in the use and preparation of standards and reagents for laboratory analysis and field screening of collected samples.
    - Ability to identify appropriate test methods and quality control as outlined in EPA SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).
    - Proficient in field analytical methods for multi-media organic and inorganic samples.
    - Proficient in identifying chemical compatibilities and incompatibilities and interpreting data for the purpose of waste characterization, determination of disposal options, developing bulking schemes and lab packing.
    - Proficient in the review and validation of analytical data and providing recommendations for the level of quality assurance/quality control required for sampling.
    - Proficient in the management of multiple analytical requests and the management and delivery of data generated.
    - Ability to prioritize and adjust workload to meet the needs of the program.

3. **Air Specialist (Environmental Scientist) (Level 3) -** This position requires a minimum of a B.S. Degree and 6 years of recent and relevant experience with air monitoring protocols. Qualifications include:

   - Proficient in air sampling protocols for organic and inorganic compounds as well as particulates.
   - Knowledge of EPAs compendium of air sampling methods and the NIOSH methods for air sampling.
   - Proficient in the development and implementation of air sampling plans for emergency response operations and removal actions.
   - Proficient in the use of air dispersion and emission rate modeling for potential or ongoing releases.
   - Proficient in the application of the basic theories, practices and principals from scientific fields including biology, chemistry, hydrology and geology.
   - Proficient with the planning, design and implementation of air modeling for site activities.
   - Ability to effectively train contractor personnel in air sampling methods.

4. **Safety Officer/Environmental Scientist (Level 3) -** This position requires a minimum of a B.S. Degree and 6 years of experience in the development and implementation of a health and safety program as required under 29 CFR 1910.120. Qualifications include:

   - Proficient in conducting health risk assessments related to emergency response operations and oil and hazardous materials spills.
   - Proficient in personal air monitoring and air sampling and providing personnel with proper Personal Protective Equipment (PPE) as required to conduct field activities at uncontrolled hazardous waste sites and at emergency response operations involving spills of oil and hazardous substances.
   - Knowledge of the EPA Standard Operating Safety Guidelines for Levels of Protection A, B, C and D.
   - Proficient in the preparation and review of written Health and Safety Plans and other associated reports.
   - Ability to provide safety oversight and conduct safety audits in the field.
   - Ability to provide safety training to contractor personnel.
   - Knowledge of safety protocols as related to chemical, biological, nuclear and radiological weapons.

5. **Geologist/Hydrogeologist (Level 3)** - This position requires a minimum of a B.S. Degree and 6 years of experience in the application of geological principals at hazardous waste sites. Qualifications include:

   - Proficient in conducting geophysical surveys and utilizing geologic databases to evaluate past and current operating conditions at hazardous waste sites as well as spills of oil or hazardous substances.
   - Ability to determine the movement of a wide range of compounds in the vadose zone and ground water and apply geology to predict ground water flow.
   - Proficient with modeling the transport of chemical contaminants and oil in the vadose and saturated zones.

6. **Information Technology Manager (Level 3)** - This position requires a minimum of a B.S. Degree and 6 years of experience with IT and software project management. Qualifications include:

   - Proficient in the use of Geographic Information Systems (GIS), including map projections, symbols and ESRI software.
   - Ability to manage environmental databases and import and export data to other data management tools.
   - Proficient in the use of Microsoft Office software and relational databases such as Oracle and SQL.
   - Knowledge of the data requirements of environmental projects, including databases applicable to scientific data management
   - Ability to effectively organize and maintain project information and documentation.
   - Experience in the basic techniques of data management, data query and mapping.
   - Ability to program in vb.net.
   - Proficient in the use of Trimble Navigation (GPS) products, Pathfinder Office and TerraSync software
   - Ability to work with local data, remote data or data feeds and incorporate this data into flat maps or into the EPA R2 Flexviewer.

D. NON-KEY PERSONNEL

The contractor shall provide a mix of the positions identified below to ensure that the core Response Team can efficiently and effectively perform the requirements in the Performance work Statement.

1. **Environmental Scientist (Level 2) -** This position requires a minimum of a B.S. Degree and 3 years experience planning, design and implementation of solutions for site cleanup and the alleviation of damage caused by hazardous substances and oil. Qualifications include:

   - Ability to apply the basic theories, practices and principals from scientific fields including biology, chemistry, hydrology and geology.
   - Knowledge of multi-media sampling, including air, solids and liquids, and related analytical methods.
   - Knowledge of disposal methods for hazardous waste.
   - Knowledge of general health and safety procedures, Personal Protective Equipment, technical writing and computer skills.
   - Ability to prepare environmental assessments which historical reference information.
   - Knowledge of on-site treatment technologies.

2. **Biologist (Level 2) -** This position requires a minimum of a B.S. Degree and 3 years experience in field biology, wildlife biology, aquatic biology, environmental impact assessment or a combination thereof. Qualifications include:

   - Ability to determine the biological impact of hazardous materials at removal sites and at emergency operations at oil and hazardous materials spills.
   - Strong background in chemistry that includes both inorganic and organic chemistry.
   - Knowledge of waste disposal methods, general health and safety procedures, Personal Protective Equipment, technical writing and computer skills.
   - Knowledge of multi-media sampling, including air, solids and liquids, and related analytical methods.

3. **Chemist (Level 2) -** This position requires a minimum of a B.S. Degree and 3 years experience in the application of chemical principals as related to hazardous waste sites and spills of oil and hazardous substances. Qualifications include:

   - Knowledge of the use and preparation of standards and reagents for laboratory analysis and field screening of collected samples.
   - Knowledge of quality control as related to environmental sampling.
   - Knowledge of field sampling and field categorization of samples collected at removal sites and emergency responses involving the release of oil or hazardous materials.

- Knowledge of chemical compatibilities and incompatibilities and interpreting data for the purpose of waste characterization, determination of disposal options, developing bulking schemes and lab packing.
- Ability to conduct air monitoring and interpret air monitoring results in the field.
- Knowledge of waste disposal methods, general health and safety procedures, Personal Protective Equipment, technical writing and computer skills.
- Strong background in biology
- Knowledge of multi-media sampling, including air, solids and liquids, and related analytical methods.

4. **Biologist, Chemist, Environmental Scientist, Microbiologist, Geologist and Hydrogeologist (Level 1) -** These positions require a minimum of a B.S. Degree. There is a one year experience requirement. These are entry level or junior positions and these personnel are expected to work independently under the guidance of more senior level staff. The Level 1 positions should be filled with a mix of science degrees to add depth and flexibility to the Core Response Team.

II. FIXED RATE INDEFINITE DELIVERY/INDEFINTE QUANTITY LABOR

The contractor must have the capability of providing all Non-Key Personnel identified above on a fixed rate, indefinite delivery/indefinite quantity basis, to supplement the activities of the Core Response Team, when required, through a Task Order or Technical Direction Document. These personnel shall have ICS Level 200 training, at a minimum. Fixed rate personnel that perform field activities shall meet the requirements in Section I.B "GENERAL PROFICIENCY REQUIREMENTS FOR ALL FIELD PERSONNEL." The fixed rate labor categories are further delineated by Level A and non-Level A labor (see Attachment 2 – Price Schedule).

A. NON-LEVEL A LABOR

1. **Industrial Hygienist (Level 3)** - This position requires a minimum of a B.S. degree in Industrial Hygiene, Industrial Health and Safety or Environmental Engineering Science, certification as an Industrial Hygienist and 5 years experience in Industrial Hygiene. This position assures the contractor's compliance with OSHA requirements, including but not limited to, 29 CFR ' 1910.120. This position also establishes and approves health and safety Standard Operating Procedures for emergency response activities. Qualifications include:

   - Experience in providing health and safety training, preparation and review of health and safety plans, conducting safety audits and managing projects.
   - Experience in providing safety oversight and audits on field projects, including releases of hazardous substances and oil; emergency, disaster and WMD response; and removal and remedial projects.

- Experience in biosafety, radioactive materials management, field sampling and analysis, decontamination and/or mitigation methods, emergency preparedness, radiation dose assessment and management, and/or toxicology.

- Expertise and experience with OSHA, NIOSH and ACGIH regulations and sampling techniques.

2. **Health Physicist (Level 3) -** This position requires a minimum of a B.S. degree in Health Physics, or physical, chemical or biological sciences; MS in Health Physics and/or current certification from the American Board of Health Physicists (ABHP). This position provides direction in the external and internal radiation monitoring program for personnel and is involved with radiological environmental monitoring. Evaluates new counting equipment and Health Physics training. This position also establishes radiological controls for work in handling radiological materials during emergency responses. Qualifications include:

   - Experience in a broad based radiation safety program.

   - Experience in the development, administration and delivery of radiation safety training programs.

   - Experience in instrumentation calibration and the performance and evaluation of field surveys.

   - Knowledge of health physics and radiation monitoring programs, procedures, equipment, and experience in methods and procedures used in monitoring for internal and external radiation exposures.

   - Experience with devices, instruments and practices used to monitor gamma, beta and neutron exposures and exposures to radionuclides.

3. **IT Specialist (Level 2)** – This position requires a minimum of two years experience using software to create and produce a variety of custom presentation maps. Qualifications include:

   - Knowledge of symbology, definition queries and annotation.

   - Knowledge of GIS, including map projections and coordinate systems.

   - Ability to produce maps using environmental data during fast paced, emergency situations.

   - Ability to integrate data gathered from field portable instrumentation, computing devices and laboratory analytical data into maps and drawings suitable for briefing Agency management or for public information.

4. Environmental Scientist, Biologist and Chemist (Level 2)

Refer to positions described in the Non-Key personnel Core Response Team for the Level 2 personnel qualifications of these labor categories.

5. IT Specialist (Level 1) - There is no degree or experience requirement. These are entry level or junior positions and these personnel are expected to work independently under the guidance of more senior level staff. Qualifications include:

- Ability to manage and manipulate large environmental databases and import data into other management tools.
- Proficient in the use of MS Office software such as Access and Excel.
- Experience in utilizing relational databases such as Oracle.
- Experience in basic practices, methods and techniques used in data management, computer and database structures applicable to data management, and basic understanding of the data requirements for a large environmental/engineering project and related processes applicable to indexing and maintaining databases of project documents.

6. Biologist, Chemist, Environmental Scientist, Microbiologist, Geologist and Hydrogeologist (Level 1)

Refer to positions described in the Non-Key personnel Core Response Team for the Level 1 personnel qualifications of these labor categories.

B. LEVEL A LABOR

The contractor shall provide a Level A team or teams, with equipment necessary to perform Level A response operations safely and in a timely manner. Level A teams shall be comprised of a mix of labor that meets any of the above personnel qualifications and corresponds with the estimated hours specified in the Level A Labor section of the Fixed Rate Indefinite Delivery/Indefinite Quantity Labor spreadsheet in Attachment 2.